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10/799,143

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EXAMINER

HOFFMAN, MARY C

ART UNIT

PAPER NUMBER

3733

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DELIVERY MODE

04/03/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/799,143 | Applicant(s) BIEDERMANN ET AL. | |
| | Examiner MARY HOFFMAN | Art Unit 3733 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1,2,5-15,21,22 and 25-32 is/are pending in the application.
- 4a) Of the above claim(s) 9-15 and 28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5-8,21-22, 25-27, 29-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>01/14/2008</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Oath/Declaration

The oath or declaration is accepted.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 7-8, 21-22 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by German Patent DE 298 10 798.

DE 298 10 798 discloses an anchoring element (FIG. 1) comprising a shaft for anchoring in a vertebra or a bone section; a rod (ref. #2) having a pre-determined diameter (D) and an outer surface; a receiving part, which is connected to the shaft and is structured and arranged to connect to the rod, the receiving part (ref. #5) having a longitudinal axis and comprising a U-shaped recess forming a channel for the reception of the rod and two legs (ref.#4) having free ends, the legs comprising a first internal thread, the legs further providing an exterior end surface of the receiving part; and a securing element (ref. #3) comprising a second screw member having a first external thread that engages and cooperates with the first internal thread; whereby a first distance from the exterior end surface of the receiving part to a closest portion of the

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outer surface of the rod in an axial direction is a pre-determined distance (A); the first internal thread extending from the exterior end surface of the receiving part to a second distance that is smaller than or equal to the pre-determined distance (A); and the receiving part further comprising an internal undercut (at ref. #6) and the first internal thread extending to the undercut, the undercut having an edge farthest away from the first internal thread, the edge being located at a third distance (B) from the exterior end surface, the distance (B) being larger than the predetermined distance (A). The undercut has a depth that corresponds at least to a depth of the first internal thread. A connection between the shaft and the receiving part is structured and arranged to be a monoaxial connection. The shaft and the receiving part are an integral part.



The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over German Patent DE 298 10 798 in view of Harms et al. (U.S. Patent No. 5,873,878).

German Patent DE 298 10 798 discloses the claimed invention except for the screw nut having an internal thread; and wherein the receiving part further comprises an external thread that cooperates with the internal thread of the screw nut.

Harms et al. disclose a screw nut (ref. #12) having an internal thread; and wherein the receiving part further comprises an external thread that cooperates with the internal thread of the screw nut for fixation of the rod in combination with an internal screw.

It would have been obvious to one skill in the art at the time of the invention was made to make an device of German Patent DE 298 10 798 a screw nut having an internal thread; and wherein the receiving part further comprises an external thread that cooperates with the internal thread of the screw nut in view of Harms et al. fixation of the rod in combination with an internal screw

Claims 6 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over German Patent DE 298 10 798 in view of Hall (U.S. Patent No. 4,041,939).

German Patent DE 298 10 798 discloses the claimed invention except for the threads being selected from a metric thread, a buttress thread, a flat thread or a thread with a negative load-bearing angle.

Hall discloses of using anchoring elements with buttress threads, which allows the element to be firmly secured (col. 1, lines 51-60).

It would have been obvious to one skill in the art at the time of the invention was made to make an device of German Patent DE 298 10 798 with buttress threads in view of Hall in order to have a firmly secured anchor element. Moreover, it would have been an obvious matter of design choice to one skilled in the art at the time the invention was made to construct the threads of German Patent DE 298 10 798 being selected from a metric thread, a buttress thread, a flat thread or a thread with a negative load-bearing angle, since applicant has not disclosed that such solve any stated problem or is anything more than one of numerous shapes or configurations a person ordinary skill in the art would find obvious for the purpose of providing threads. In re Dailey and Eilers, 149 USPQ 47 (1966).

Claims 29 and 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over German Patent DE 298 10 798.

German Patent DE 298 10 798 discloses the claimed invention except for the first thread comprising fewer than four full turns. It would have been an obvious matter of design choice to construct the first thread comprising fewer than four full turns (the threading covers a smaller area), since such a modification would have involved a mere change in the size of a component, i.e. the threaded area/overall height of the receiving part. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955).

Response to Arguments

Applicant's arguments filed 01/14/2008 have been fully considered but they are not persuasive.

Applicant has provided a marked up figure of DE 298 10 789, Fig. 1, in the Remarks filed 1/14/2008, showing the right hand thread extending to a position beneath the outer surface of the rod. However, Applicant has not shown where the support for their version of the marked-up figure appears in the DE 298 10 789 specification. Also, Applicant has not provided any explanation or reasoning as to why the DE 298 10 789 right hand threading would extend to a position beneath the outer surface of the rod as shown in the marked-up figure.

Furthermore, regarding the rejection of claims 29 and 30, it would be an obvious matter of design choice to construct the first thread comprising fewer than four full turns (the threading covers a smaller area), since such a modification would have involved a mere change in the size of a component, i.e. the threaded area/overall height of the receiving part. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955). It is noted that the rationale to modify or combine the prior art does not have to be expressly stated in the prior art; the rationale to modify may be expressly or impliedly contained in the prior art or it may be reasoned from knowledge generally available to one of ordinary skill in the art, established scientific principles, or legal precedent established by prior case law. In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). As Applicant stated in their Remarks section, page 2,

lines 10-12, reducing the overall height of the receiving part consequently reduces the number of turns. Because it would be an obvious to change of size to reduce the overall height of the receiving part, it is also obvious to have a fewer number of turns.

Regarding claims 31 and 32, the depth of the undercut of the DE 298 10 789 patent seems to be greater than the depth of a thread.

The rejections are deemed proper.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary Hoffman whose telephone number is 571-272-5566. The examiner can normally be reached on Monday-Friday 9:00-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo C. Robert can be reached on 571-272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mary C. Hoffman/
Examiner, Art Unit 3733

/Eduardo C. Robert/
Supervisory Patent Examiner, Art Unit 3733